

SWR# 30825

#### EXECUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interin, Final 2/5/99

# RCRA Corrective Action Environmental Indicator (EI) RCRIS code (CA750;

Migration of Contaminated Groundwater Under Control

	Name: Address: EPA ID #:	Phelps Dodge Refining Corporation, El Paso Operations P.O. Box 20001, El Paso, TX 79998 TXD048924989
1.	groundwater me	ole relevant/significant information on known and reasonably suspected releases to the dia, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), (RU), and Areas of Concern (AOC)), been considered in this EI determination?
	_x_	_ If yes - check here and continue with #2 below.
	200	If no - re-evaluate existing data, or
	-	if data are not available, skip to #8 and enter"IN" (more information needed) status code.
DACKO	CDOUND	

#### <u>BACKGROUND</u>

#### Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

#### **Definition of "Migration of Contaminated Groundwater Under Control" EI**

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

#### Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

#### **Duration / Applicability of EI Determinations**

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

#### Migration of Contaminated Groundwater Under Control Environmental Indicator (EI) RCRIS code (CA750) Page 2

2.	Is <b>groundwater</b> known or reasonably suspected to be "contaminated" above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?
	If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.
	_X If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."
	If unknown - skip to #8 and enter "IN" status code.
	Rationale and Reference(s): Phelps Dodge operated several evaporation ponds for the storage and disposal of process wastewater from 1965 to 1998. The ponds were taken out of service in 1998. Metals impacted soil and sediment from the pond bottoms were excavated and disposed of in an onsite engineered disposal unit. Post excavation soil and groundwater confirmation samples were used to verify closure of the ponds in accordance with the Texas Risk Reduction Program Rule (TRRP) [30 Texas Administrative Code (TAC) Chapter 350]. The TCEQ has verified that the concentration levels remaining in soil at the facility are below risk-based levels established for commercial/industrial exposures (i.e, Remedy Standard A, commercial/industrial risk-based Protective Concentration Limits) established for metals in soil. Groundwater was investigated to support the closure of the evaporation ponds and was verified to meet background levels. Relevant information supporting the closure of the evaporation ponds is found in the June 30, 2003 Revisions to the Final Affected Property Assessment Report for Phelps Dodge Corporation, dated October 2002, Revised June 2003. This information was approved by the TCEQ in a letter dated February 20, 2004.
	**************************************

#### Footnotes:

"Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

#### Migration of Contaminated Groundwater Under Control Environmental Indicator (EI) RCRIS code (CA750) Page 3

	ed at the time of this determination)?  If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater
	sampling/measurement/migrationbarrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination".
	If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination" skip to #8 and enter "NO" status code, after providing an explanation.
,	If unknown - skip to #8 and enter "IN" status code.
Rationale	and Reference(s):
Y-4 1070	
1	

verifiably demonstrated to contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

# Migration of Contaminated Croundwater Under Control Environmental Indicator (EI) RCRIS code (CA750) Page 4

Does "conta	minated" groundwater discharge into surface water bodies?
	If yes - continue after identifying potentially affected surface water bodies.
, and the second	If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing a explanation and/or referencing documentation supporting that groundwater "contamination does not enter surface water bodies.
	If unknown - skip to #8 and enter "IN" status code.
Rationale an	d Reference(s):
-	
-	

# Migration of Contaminated Groundwater Under Control Environmental Indicator (EI) RCRIS code (CA750) Page 5

5.	maximum concen appropriate ground contaminants, or e	of "contaminated" groundwater into surface water likely to be "insignificant" (i.e. the tration <sup>3</sup> of each contaminant discharging into surface water is less than 10 times their dwater "level," and there are no other conditions (e.g., the nature, and number, of discharging nvironmental setting), which significantly increase the potential for unacceptable impacts to iments, or eco-systems at these concentrations)?
	8 9	If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.
		If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.
		If unknown - enter "IN" status code in #8.
	Rationale and Refe	erence(s):

<sup>&</sup>lt;sup>3</sup> As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

#### Migration of Contaminated Groundwater Under Control Environmental Indicator (EI) RCRIS code (CA750) Page 6

5.	(i.e., not cause in	ge of "contaminated" groundwater into surface water be shown to be "currently acceptable" npacts to surface water, sediments or eco-systems that should not be allowed to continue until ecision can be made and implemented ??
		If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR  2) providing or referencing an interim-assessment, appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.  If no - (the discharge of "contaminated" groundwater can not be shown to be "currently acceptable") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.
	St. 13	If unknown - skip to 8 and enter "IN" status code.
	Rationale and Re	ference(s):

<sup>&</sup>lt;sup>4</sup> Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

<sup>&</sup>lt;sup>5</sup> The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

## Migration of Comminated Groundwater Under Control Environmental Indicator (Ef) RCRIS code (CA750) Page 7

Will groundwater monitoring / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"
If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."
If no - enter "NO" status code in #8.
If unknown - enter "IN" status code in #8.
Rationale and Reference(s):

8.

#### Migration of Contaminated Groundwater Under Control Environmental Indicator (EI) RCRIS code (CA750) Page 8

EI (event code	opriate RCRIS status codes for the Migration of Cont CA750), and obtain Supervisor (or appropriate Mana selow (attach appropriate supporting documentation a	ger) signature and date on the EI
, _X	YE - Yes, "Migration of Contaminated Groundwerified. Based on a review of the information contit has been determined that the "Migration of C"Under Control" at the Phelps Dodge Refining CoTXD048924989, located at El Paso, TX. Specifical that the migration of "contaminated" groundwat monitoring will be conducted to confirm that contawithin the "existing area of contaminated groundwate-evaluated when the Agency becomes aware of significant contaminated when the Agency becomes	tained in this EI determination, ontaminated Groundwater" is orporation facility, EPA ID # ly, this determination indicates et is under control, and that univated groundwater remains ter" This determination will be
s ( <del>Company</del>	NO - Unacceptable migration of contaminated gro	oundwater is observed or expected.
	IN - More information is needed to make a determ	ir lation.
Completed by	(signature) Siff of Welme: (print) Eleanor Wehner (title) Project Manager	Date 1/10/06
Supervisor	(signature) (print) Joyce Sirota (title) Supervisor	Date 1/19/06
	Texas Commission on Environmental Quality	
Locations where	References may be found:	
TCEQ	Central Records, Austin, Texas	-
Contact telephon	e and c-mail numbers:	
	Manager listed above	

Final Note: The purpose of the Migration of Contaminated Groundwater EI is to verify that the groundwater plume is stable. A "YE" determination does not constitute a screening tool to end the corrective action process. The "YE" determination may be changed at any time as new information becomes available.

corract@tceq.state.tx.us



SWR# 30825

#### DOCUMENTATION OF ENTORONMENTAL INDICATOR DETERMINATION

Interini Final 2/5/99

# RCKA Corrective Action Environmental Indicator (EI) RCRIS code (CA725)

#### Current Human Exposures Under Control

Facility	Name:	Phelps Dodge Refining Corporation, El Paso Operations
Facility	Address:	P.O. Box 20001, El Paso, TX 79998
Facility	EPA ID #:	TXD048924989
1.	groundwater, sur	e relevant/significant information on known and reasonably suspected releases to soil, face water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste ts (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this
	X_	If yes - check here and continue with #2 below.
	<del>(                                    </del>	If no - re-evaluate existing data, or
		if data are not available skip to #6 and enter"IN" (more information needed) status code.

# BACKGROUND

#### Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

#### Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

#### Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

#### **Duration / Applicability of EI Determinations**

El Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

# Environmental Indicator (EI) RCRIS code (CA725)

		Yes	<u>No</u>	<u> </u>	Rationale / Key Contaminants				
	undwater		_X_						
	(indoors) <sup>2</sup>		_x_ _x_						
	face Soil (e.g., face Water	<2 ft)	X						
Cad	:		_X_						
Sub	surf. Soil (e.g.,	>2 ft)	_X_	200					
Air	(outdoors)	-2 11)	_X _X	<u> </u>					
	(outdoors)		-^-						
	these "levels" are not exceeded.  If yes (for any media) - continue after identifying key contaminants in each "contaminated"								
	medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.								
	If	`unknown (f	or any me	dia) skij	to #6 and enter "IN" status code.				
			25 dd - 2245 d	e •					
disp Met site to ve [30]	osal of process als impacted so engineered dis erify closure of Texas Adminis Is remaining in	wastewater oil and seding posal unit. The ponds in trative Codes oil at the f	from 190 ment from Post excar n accorda e (TAC) C acility are	65 to 199 the pon- vation so ince with Chapter 3 e below r	ted several evaporation ponds for the storage and 8. The ponds were taken out of service in 1998. d bottoms were excavated and disposed of in an onial and groundwater confirmation samples were used the Texas Risk Reduction Program Rule (TRRP) (50]. The TCEQ has verified that the concentration isk-based levels established for andard A. commercial/industrial risk-based				
disp Met site to v [30] leve com Prot closs	as al of process als impacted so engineered dis erify closure of Texas Adminis ls remaining in mercial/indust tective Concenture of the evapts as ment Report	wastewater oil and sedir posal unit. I the ponds i trative Code soil at the frial exposur tration Limitor Phelps L	r from 190 nent from Post excar n accorda e (TAC) C acility are es (i.e, Re its) estable ds is foun Podge Cor	of to 199, a the pon- vation so ance with Chapter 3 as below remedy St ished for d in the sporation,	8. The ponds were taken out of service in 1998. It bottoms were excavated and disposed of in an on il and groundwater confirmation samples were use the Texas Risk Reduction Program Rule (TRRP) [50]. The TCEQ has verified that the concentration				

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

<sup>&</sup>lt;sup>2</sup> Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

### Current Human Exposures Under Control Environmental Indicator (EI) RCRIS code (CA725) Page 3

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential Human Receptors (Under Current Conditio
---

"Contaminated" Med	ia Residents	Workers	Day-Care	Constructio	n Trespassers	Recreation	1 Food <sup>3</sup>
Groundwater	70 <u>200.00</u>	-		·			
Air (indoors)			2				
Soil (surface, e.g., <2	ft)						
Surface Water	30 <del></del>						,,
Sediment							
Soil (subsurface e.g., >	2 ft)						
Air (outdoors)	E 2						
Instructions for Summa	ary Exposure P	athway Ev	aluation Ta	<u>ıble</u>			
	specific Media l") as identified			ceptors' spac	ces for Media v	which are n	ot
	or "no" for po bination (Pathy		mpleteness	" under each	ı "Contaminate	ed" Media -	Human
Note: In order to focus the Human Receptor combon not be probable in most	oinations (Pathy	ways) do n	ot have chec	k spaces ("_	"). While th	ese combin	ations may
to #6, whetl conta	(pathways are in and enter "YE ner natural or minated mediu ways).	" status co man-mad	de, after ex le, prevent	plaining and ing a comp	or referencing lete exposure	condition(s	s) in-place, from each
	s (pathways a ination) - conti					- Human	Receptor
	nown(for any ' "IN" status cod		ated" Medi	a - Human Ro	eceptor combir	nation) - skij	p to #6 and
Rationale and Reference	e(s):		***************************************				
			W.				
3 Indirect Pathway/Rece	ptor (e.g., vege	etables, fru	iits, crops, i	neat and dai	ry products, fis	sh, shellfish	, etc.)

## Current Human Exposures Under Control Environmental Indicator (EI) RCRIS code (CA725) Page 4

4	Can the exposures from any of the complete pathways identified in #3 be reasonably expected to be "significant" (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?
	If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."
	If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway)-continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."
	If unknown (for any complete pathway) - skip to #6 and enter "IN" status code.  Rationale and Reference(s):

<sup>&</sup>lt;sup>4</sup> If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

# Current Human Exposures Under Comres Environmental Indicator (EI) RCRIS code (CA725) Page 5

5	Can the "significant" exposures (identified in #4) be shown to be within acceptable limits?	
	If yes (all "significant" exposures have been shown to be within acceptable limits) - continuand enter "YE" after summarizing and referencing documentation justifying why a "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).	11
	If no (there are current exposures that can be reasonably expected to be "unacceptable" continue and enter "NO" status code after providing a description of each potentiall "unacceptable" exposure.	
	If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" statucode	S
	50 - 1 CONTROL OF SECTION OF SECT	

6.

David Voyler 5:74 Leglini 6 214 665 - 6762 (fine)

Vine Backler

#### Current Human Exposor of Under Contro! Environmental Indicator (E.S.) EEES code (CA725) Face C

(CA725), and ob	priate RCRIS status coder for the Current Human Exposures Under Control El event code otain Supervisor (or appropriate Manager) signature and date on the El determination below opriate supporting documentation as well as a map of the facility):
_x_	YE - Yes. "Current Human Exposures Under Contro!" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Contro!" at the Phelps Dodge Relining Corporation facility, EPA ID #TXD048924989, located at El Paso, Texas under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
	NO - "Current Human Exposures" are NO1 "Unde Control."
	IN - More information is needed to make a determination.
Completed by	(signature) = 12ants T. Wehren Date 11910kc (print) Eleanor T. Wehner (title) Project Manager
Supervisor	(signature) Succession Date   19/06 (print) Joyce Snotz (title) Supervisor Texas Commission on Environmental Quality
Locations where	References may be found:
TCEQ	Central Records, Austin, Texas
2 <del></del>	
Contact telephone	and e-mail numbers:

Final Note: The purpose of the Human Exposures EI is to qualitatively screen exposures based on current land and groundwater use. A "YE" determination does not constitute a screening tool that ends the corrective action process. The "YE" determination may be changed at any time as new infor nation becomes available.

Project Manager listed above

corract@tceq.statc.tx.us

(512) 239-2343

# PATA CHANGES

OC: 4/1/8# File Code:TT B	red: 3·30·88	Entered by: R.V. Date Entered:
	C1803=1 C1804=1	3
	C1803=1 C1804=1 C1803=1 C1804=1	Process Codes- Add - Delete - Change C1801=3 C1802=13 C1802=13
deleted/C2701	Waste Codes to be d	E Codes to be added/C2701
		Owner's Name/C1503=40
ST/C2=2 Zip/C111=5		City/C111=25
ST Dist/C115=2		Location Address/C110=30
Ownership Code/C102		Facility Contact Person/Cl05=30
ST/C108=2 Zip/C109=5		City/C107=25
County/C114=		Mailing Address/C106=30
DATE 1-26-88	#/C116=6 PREPARER	EPA IDENTIFICATION NUMBER/C101=12  TWC #/ Facility Name/C104=40  TWC #/

Do not make entries in shaded areas

# ENVIRONMENTAL PROTECTION AGENCY

# Generator Biennial Hazardous Waste Report for 1985 (cont.)

This report is for the calendar year ending December 31, 1985 Phelps Dodge Refining Corporation

GENERATOR'S NAME:

....

Date rec'd: Rec'd by:

KV. GENERATOR'S EPA I.D. NO.

TAC

5 TX D 90 78 9 7 14 4 1

1. WASTE MINIMIZATION (narrative description)

In 1984, the volume of the Process Solution sent to the Solar Evaporator Ponds was 433,830 gallons. In 1985, the volume of this Process Solution was reduced to only 57,169 gallons. This reduction of 376,661 gallons represents 86.82% of the volume produced in 1984. These reductions were accomplished by a combination of the following:

- The Copper Reduction System was changed from a Scrap Iron Copper Reduction to an Electrolytic Plating Reduction of the Copper Solution;
- Weak contaminated solutions were used in the pH neutralization scrubber instead of fresh water make up. Thus the waste reduction emphasis also produced a fresh water conservation step;
- 3. Waste solutions which were generated separately from three distinct and independent departments were transferred from one department to the next for equipment washing, etc. with the result that the one final solution discharged from the last department was less in volume than the combined flow from the three departments in 1984.



#### P - C - L - W TRACKING

Phelps Docke Copper 166 3-20-86

P - C - L - W TRACKING

TXD 007 397 144

FACILITY ID:

NEW ENTRY XX

全型温度同

CHANGE ENTRY -

DELETE ENTRY -

HEADER TYPE: 43 (C2001) (C2001) HEADER TYPE BEQ NO:  $\frac{01}{01}$  (C2002) TRACKING SEQ NO:  $\frac{01}{01}$  (C2102).

RESPONSIBLE AGENCY: 5 (C2114)

RESPONSIBLE PERSON: --- (CZ 107)

DATE DUE: -----(C2104) YYMMED ACTION DATE: 850808

STATUS CODE: --(C2106)

(C2 105) FREE FIELD 1: - ((2108)

FREE FIELD 2: -- ((2109)

FREE FIELD 3: --- (

FREE FIELD 4: --- (CZIII)

FREE FIELD 2: -- (C2109) FREE FIELD 3: --- (C2112) FREE FIELD 6: --- (

(C2115) COMMENT TEXT (80 CHARACTERS MAXIMUM) :

PERMIT ACTION LINKED TO

PERMIT ACTION LINK CHANGED FROM -----

DELETE PERMIT ACTION LINK TO -----

# TEXAS WATER COMMISSION

Paul Hopkins, Chairman Ralph Roming, Commissioner John O. Houchins, Commissioner



Larry R. Soward, Executive Director

Mary Ann Hefner, Chief Clerk

James K. Rourke, Jr., General Counsel

February 11, 1986

Mr. Henry Onsgard, Acting Chief Technical Section Hazardous Waste Compliance Branch Region VI - 6H-CP U.S. Environmental Protection Agency 1201 Elm Street Dallas, Texas 75270

Dear Mr. Onsgard:

Re: Transmittal of RCRA Part B Permit Applications

Transmitted herewith are microfiche copies of Part B hazardous waste permit applications for the below-listed companies.

Should you have any questions please feel free to contact Mr. Cesar Farias or Mr. Rex Coffman at AC512/463-8193.

Sincerely,

Minor Brooks Hibbs, Chief

Permits Section

Hazardous and Solid Waste Division

CAF: lab



Rollins Environmental Services American Petrofina Inc. Shell Chemical Company DuPont De Nemours & Co., E.I. Texaco Refining & Mktg Inc. Badische Corp. Exxon Company Atchison, Topeka & Santa Fe Rwy Fina Oil and Chemical Company Arco Petroleum Products Com.	01429 30002 30007 30010 30026 30024 30040 30065 30083 30092	TXD055141378 TXD065099160 TXD067285973 TXD008081101 TXD007399637 TXD008081697 TXD000782698 TXD000778621 TXD008013468 TXD082688979
Phelps Dodge Refining Temple-Eastex Inc.	30104 30112	TXD007397144 - TXD000821199
Phillips Petroleum Co.	30112	TXD041516709
✓ Texas Eastman Co.	30131	TXD007330202
Monsanto Co.	30137	TXD001700806
Tyler Pipe	30140	TXD066349770
Shell Oil Co.	30258	TXD026896290
Monsanto Co.	30285	TXD008079527
Air Products & Chemicals Inc.	30317	TXD990757486
Mostek Corp.	30362	TXD047830443
Ethyl Corp.	30465	TXD008096158
Koch Refining Co.	30529	TXD088474663
International Paper Co.	30568	TXD008077356
International Business Machines Corp.	30576	TXD041470543
Mobil Oil Corp.	30587	TXD990797714
Mobay Chemical Corp.	30603	TXD058260977
Chevron U.S.A. Inc.	30605	TXD054256391
Texaco Chemical Co.	30688	TXD041470980
Dixico Incorporated	30695	TXD098423536
Stauffer Chemical Co.	31019	TXD008099079
Smith, W.J. Wood Preserving Co.	31332	TXD066368879
Structural Metals, Inc.	31533	TXD008119414
Houston Lighting and Power	31633	TXD000837369
Sohio Chemical Co.	32164	TXD000751172
DuPont De Nemours & Co., Inc.	32212	TXD980627137
-> Transwestern Pipeline	32564	TXD095437216 —
Lubrizol Corp.	32630	TXD089741532
Paktank Corp. Petro Processors Inc.	33579	TXD000807982
Temple-Eastex, Inc.	33648	TXD980745285
U.T. Health Sciences Center	35814 65014	TXD980626741
Exxon Research & Engineering	30717	TXD071378822 TXD040314338
DANOII Research & Bligtilecting	30111	177040314339

FILE S. S

TEXAS DEPARTMENT OF WATER RESOURCES

NOT LDF

RECORD CONFERENCE

Project: Phelps - Dodge 30104	10.0000
Conference date: Nov 1, 1985 Place:	
Type of conference: <u>permits /enforcement</u> (telephone, staff, form other)	al or informal hearing,

#### Attendance:

Name	Agency	
See attached list		

summary: Phelps-Dodge was informed that according to current interpretation of the mining waste exclusion they do not generate hazardous waske and do not require a Past B permit application. The company indicated they would submit an affadavit of exclusion to withdraw their permit application. Solid waste violations were addressed including discharge of metals in runoff water. The company intends to isolate areas contributing metals to runoff including storage areas for baghouse dust, slag, regractory brick and incinevator ash by changing waste management practices and installing beams. They also plan to close the existing surface impoundments and install a septem to remove metals from the wastewater stream. A closure plan will be submitted for the surface impoundments and a schedule to address violations will be sent to the company via Executive Director Letter.

expected in the next year which may result in listing (KO64) of a Phelps-Dodge waste Stream.

Prepared by: Christy Smith

WILLIAM A. EVANS [1907-1978] JOS. 5. JENCKES, JR. [1908-1970]

JOHN F. BOLAND, JR.
EDWARD C. LEBEAU
BURTON M. APKER
NEWMAN R. PORTER
FRED E. FERGUSON, JR. JERRY W. LAWSON JERRY L. HAGGARD F. PENDLETON GAINES III ROBERT J. HACKETT ARNE M. ROVICK JOSEPH P. HIENTON KENNETH W. REEVES III DAVID P. KIMBALL III DAVID P. KIMBALL III
ALVIN H. SHRAGO
JOHN W. MAIN, JR.
DON J. MINER
GREGORY L. MAST
RANDALL S. TAVITZ
BARBARA M. TORREZ
JULIE A. DOHERTY
STEVEN J. CHRISTIANSEN LINDA L.HUDSON ROSS M.COOPER ROSS M. COOPER
J. STANTON CURRY
JAMES A. CRAFT
JAMES W. KAUCHER
BARBARA L. HULS
MICHAEL B. WOOD
TIMOTHY W. HOLT
CORINNE E. GIAGNORIO
OULISE A WEDDO

LOUISE A. WERHO

JAMES M. BUSH
LESLIE T. JONES, JR.
STEPHEN W. POGSON
WILLIAM H. JURY
ROBERT R. MILLS [94-1984] ROBERT R. MILLS 194
GARY H. FRY
LEON D. BESS
LEX J. SMITH
JAMES G. SPEER
DEAN C. SHORT II
WILLIAM L. KURTZ
AMY R. COY
NATHAN R. NIEMUTH
RABBY DALE NATHAN R. NIEMUTH
BARRY J. DALE
RICHARD L. SALLOUIST
STANTON A. SHAFER
DAVID J. OUIMETTE
STEVEN A. HIRSCH
DANIEL L. MUCHOW
JOHN J. FRIES
JOHN T. MOSHIER
DAVID F. GAONA
WILLIAM M. SHATTUCK
KATHERINE M. HARMEYER
CYNTHIA Y. MSCOY
JULIE J. STOCKWELL
JAMES M. BELIN
H. SULLIWAN BUNCH
STEPHEN D. TREUER
JAY S. KRAMER JAY S. KRAMER

LAW OFFICES

Evans, Kitchel & Jenckes, P.C.

2600 NORTH CENTRAL AVENUE

PHOENIX, ARIZONA 85004-3099

(602) 234-2600

January 30, 1985

DENISON KITCHEL OF COUNSEL

TELECOPIER 602-234-8856

SCOTTSDALE OFFICE

SUITE B-III

6991 EAST CAMELBACK ROAD SCOTTSDALE, ARIZONA 85251-2467

SUN CITIES OFFICE BELL PLAZA PROFESSIONAL BLDG. SOUTH 17220 BOSWELL BOULEVARD SUN CITY, ARIZONA 85373

RECENTED

FEB 0 4 785

ENFORCE SENT AND FIELD OPERATIONS

Mr. Bob Lee Enforcement and Field Operations Division Texas Department of Water Resources 1700 North Congress Avenue Austin, TX

Phelps Dodge El Paso Refinery

Dear Mr. Lee:

Enclosed please find the revised closure plan for the Phelps Dodge El Paso Refinery. This letter will confirm that Phelps Dodge is in the process of obtaining financial assurance for the revised closure plan through the National Bank of El Paso. We anticipate providing you with evidence of financial assurance from the bank within the next two weeks.

Thank you for your courtesy and cooperation in this matter.

Sincerely,

J. Stanton Curry

For EVANS, KITCHEL & JENCKES, P.C.

JSC/mm Enclosure cc w/encl. Mr. Jay Snow

# Hazardous Industrial Solid Waste Closure Plan

Ref: TAC 335.211 - 335.216

The two evaporator ponds will be closed by ceasing input, evaporating as much liquid as possible, and transporting the residue to our smelter at Douglas, Arizona.

The following costs are estimated for that time when residue fills the bottom 3 feet of the "Large Pond" and the bottom 5 feet of the "B.V. Pond".

# 1. "Large Pond"

Remove and load sludge into railroad cars 5,350 c.y. @2.00	10,700
Railroad freight to Douglas smelter @\$13.28 ton (1 c.y. = 1.5 tons)	106,572
Removal of Pond liner	3,000
Removal of surrounding earth, if required	10,000

## 2. "B.V. Pond"

	Remove and load sludge into railroad cars 2,667 c.y. @2.00	5,334
	Railroad freight to Douglas smelter @\$13.28/ton (1 c.y. = 1.5 tons)	53,127
	Removal of pond liner	2,000
	Removal of surrounding earth, if required	8,000
3.	Soil tests for residual hazardous waste characteristics	10,000
4.	Independent certification of closure by registered professional engineer	15,000
	Total	223,733

Total closure time after ceasing use is estimated to be 2 years, 12 to 18 months to evaporate the liquid in the ponds and 6 months for removal of waste, soil analyses and certification.

BES 1-4-85

AS DEPARTMENT OF WATER RL JURGE

1700 N. Congress Avenue Austin, Texas



TEXAS WATER DEVELOPMENT BOARD

Louis A. Beecherl, Jr., Chairman George W. McCleskey, Vice Chairman Glen E. Roney W. O. Bankston Lonnie A. "Bo" Pilgrim Louie Welch



Charles E. Nemir Executive Director

June 11, 1984

TEXAS WATER COMMISSION
Paul Hopkins, Chairman
Lee B. M. Biggart
Ralph Roming

CERTIFIED MAIL-RETURN RECEIPT REQUESTED NO. P 656 965 749

Phelps-Dodge Refining Corporation P 0 Box 20001 El Paso, Texas 79998

Attention: Mr. Bobby Stephens,

Plant Engineer

Dear Mr. Stephens:

Re: Industrial Solid Waste Registration No. 30104 Compliance Inspection

On May 3, 1984, Texas Department of Water Resources representative Jim Gooris of our District 10 office in Odessa visited your facility for an industrial solid waste compliance inspection. During the inspection the following violations were noted:

- 1. Texas Administrative Code Section 335.6 requires that a generator of industrial solid waste immediately notify the Executive Director of any information relating to the management of such waste. We understand that baghouse dust, slag and furnace bricks are generated at your facility and are recycled for their metals value. Please be advised that these, and any other, recycled wastes must be managed as wastes until they are recycled. Please request that your recycled waste be included on your solid waste registration. This request may be submitted to the Department's Central Office, Permits Division, Solid Waste Section (See address below).
- 2. As required by TACS 335.114 (attached), your facility must develop and follow a written waste analysis plan. In addition, under TACS 335.62, all wastes generated must be determined to be hazardous or nonhazardous. During the May 3 inspection, no such analyses or determinations were available.



- 3. The owner or operator of a hazardous waste facility must develop and follow a written inspection schedule to inspect hazardous waste facilities as defined by TACS 335.116 and 335.285. Records of such inspections shall be kept available for inspection by department representatives.
- 4. The owner or operator of a hazardous waste facility must make arrangements with local emergency response authorities as required by TACS 335.147. We understand that such arrangements to familiarize local authorities with your facility have not been completed.
- 5. Contingency plans and emergency procedures as required by TACS 335.151-335.157 must be prepared for your facility. A contingency plan as required by these sections was not available for inspection during the May 3 inspection.
- 6. The owner or operator of a hazardous waste facility must keep a written operating record of the location and disposition and amount of each hazardous waste at the facility. Requirements for this operating record are outlined in TACS 335.173.
- 7. A closure/post-closure plan must be prepared for your facility as required by TACS 335.211-335.220. Review of your facility's present closure plan indicates that this plan is not adequate to meet these requirements. Specific items not met are as follows:
  - a). Decontamination of equipment and structures
  - Specifications which will be met to assure closure standards are met (analytical parameters, sampling method, extent of sampling, etc)
  - c). The expected year of the closure
  - d). A final schedule for closure
- 8. Personnel training as required by TACS 335.117 must be conducted at your facility. This training must train employees to perform their duties in a way which insures the facility's compliance with the rules of the department. Records of this training must be kept available for inspection by department representatives.
- 9. Financial assurance for your closure/post-Closure cost estimate must be submitted as required by 40 CFR, Part 265, Subpart H. No such document has been received.
- Proof of sudden release liability insurance must be submitted as required by 40 CFR, Part 265, Subpart H. No such document has been received.

Please respond in writing within thirty (30) days with your actions

page 3
June 11, 1984



to correct each of these violations and the dates by which these actions will be completed. Should you require assistance please contact me or Mr. Gooris at the District 10 office.

Sincerely,

William F. Lockey, District Supervisor

WFL/JG:pb

Attachment

cc Solid Waste and Spill Response Section-Austin

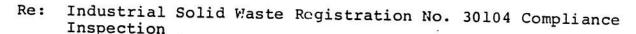
DICIDS

OCCUPATION El Paso Works • P.O. Box 20001, El Paso, Texas 79998 • (915) 778-9881

D BL BY

July 30, 1984

Mr. William F. Lockey District 10 Supervisor 204-A W. 5th Street Odessa, Texas 79761



Dear Mr. Lockey:

Your June 11, 1984 letter to Phelps Dodge Refining Corporation listed ten violations which allegedly have been occurring at the El Paso refinery with regard to three materials: baghouse dust, slag, and furnace bricks.

Phelps Dodge is anxious to cooperate with the Texas Department of Water Resources to resolve this matter. However, we believe that these three materials which are reused and/or recycled at the refinery are not subject to the regulatory provisions identified in your letter of June 11, 1984. For this reason, the following comments are submitted for your consideration.

# Solid Waste Regulation

In the first paragraph of your letter, Phelps Dodge is advised of the notification and registration requirements under TACS 335.6. You mentioned that "recycled wastes must be managed as wastes until they are recycled." Phelps Dodge's materials are recycled but they are not wastes under the regulatory definitions.

# Solid Waste Definition

Subchapter A of the TAC regulates industrial solid waste. The definition of solid waste in TACS 335.1 is substantially equivalent to that in 40 C.F.R. § 261.2(a). The materials in question-baghouse dust, slag, and furnace bricks--are not garbage, refuse, or sludge. If they are to be characterized as solid waste, they must be considered "other waste material." This is defined as "any solid, liquid, semi-solid or contained

Mr. William F. Lockey July 30, 1984 Page 2

gaseous material resulting from industrial, commercial, mining or agricultural operations, or from community activities which ... is discarded or sometimes discarded. 40 C.F.R. § 261.2(b). "A material is 'discarded' if it is abandoned and not used, re-used, reclaimed or recycled ... 40 C.F.R. § 261.2(c).

All three of the materials in question (baghouse dust, slag, and furnace bricks) are recycled, that is, they are not discarded nor sometimes discarded at the El Paso refinery. Indeed baghouse dusts are recycled to recover high copper concentrations. The slag is recycled to recover copper and other metal values. The furnace bricks are recovered for reuse in the furnace and elsewhere. An economic incentive exists to properly reuse these materials. Thus, they should not be classified as "other waste material" under the federal definition or "other discarded material" under the Texas definition. Materials, such as those of Phelps Dodge, which are not "garbage, refuse, sludge or any other waste material" are not solid wastes. TACS 335.6 applies to "the on-site storage, processing, or disposal of industrial solid waste..." The Phelps Dodge materials are not solid waste and therefore should not be subject to this regulation.

### Proposed Amendment to Solid Waste Definition

On April 4, 1983, the EPA proposed an amendment to the definition of solid waste (expected to go into effect at the end of this year) which further illustrates on intention to exclude recycled materials, such as those of Phelps Dodge, from any waste regulation. Two problems with the current definition were noted. First, materials are currently defined as solid wastes even "if they are being recycled in a manner not ordinarily thought of as waste management." Proposed rules, 48 FED. Reg. 14,475 (1983). The second problem deals with the "sometimes discarded" test which may exist in the Texas definition by inference. EPA has recognized that the "sometimes discarded" test, although never intended, would categorize many product-like materials as solid wastes under a literal reading of the current regulations. Id.

The new proposed definition bases a material's regulatory status on what the material is and how it is actually managed. In addition, only those recycling activities which pose a significant potential for environmental harm would be regulated. The EPA has found that when a generator retains control of the recycled material, it can generally assure a market for materials. On the other

NOV 18 1983

Kenneth S. Jagmin
Special Risks Department
Shand, Morahan and Company, Inc.
One American Plaza
Evanston, Illinois 60201

Reference: Phelps Dodge Copper Products Co. - TXD 04 892 4989

Phelps Dodge Refining Corporation - TXD 00 739 7144

Dear Mr. Jagmin:

Thank you for your recent submittal of the required documentation to show compliance with the Resource Conservation and Recovery Act (RCRA) financial regulations, 40 CFR 265, Subpart H, as amended on April 7, 1982, 47 FR 16032, and April 16, 1982, 47 FR 16544. The State of Texas is authorized to operate an equivalent financial program in lieu of the Environmental Protection Agency. Therefore, by copy of this letter, your submittal is being forwarded to:

Mr. Robert G. Brydson, Jr.
Texas Department of Water Resources
P. O. Box 13087, Capitol Station
Austin, Texas 78711
(512) 475-3345

If you have any questions, please call Henry Onsgard at (214) 767-9720 or me at (214) 767-2645.

Sincerely yours,

Guanita S. Reiter, Acting Chief State Programs Section

cc: Texas Department of Water Resources

6AW-HP: Hood: 7-9725: nb: 11/16/83

	4 Dec 4 (1835) 2009 4 H Communication
SURNAME	
DATE	

GPO: 1983 0 - 403-201

SHAND, MORAHAN & COMPANY, INC. / ONE AMERICAN PLAZA / EVANSTON, ILLINOIS 60201 / PHONE (312) 866-2800

November 8, 1983

Environmental Protection Agency 1201 Elm Street Dallas, TX 75270

Re: Phelps Dodge Corp.

Environmental Impairment Liability

Policy No.: IE 100107

Location: Phelps Dodge Copper Products Co.

897 Hawkins Road, P.O. Box 20200

El Paso, TX 79998 TXD 04 892 4989

HAZARDOUS MATERIA

Phelps Dodge Refining Corporation

6999 North Loop Road

El Paso, TX 79998 TXD 00 739 7144

Period: From January 14, 1983 to January 14, 1984

Insurer: Evanston Insurance Company

#### Gentlemen:

Please take notice that this insurance issued to you through the undersigned is hereby cancelled effective on the 8th day of January, 1984 at 12:01 AM Standard Time at the place of your address written above.

This notice of cancellation is given to you pursuant to the conditions of said insurance and all liability thereunder will cease and terminate at said time and date. Upon written request within 30 days of the cancellation effective date, the undersigned will furnish on behalf of the insurer the reason for cancellation.

Very truly yours,

SHAND, MORAHAN & COMPANY, INC.

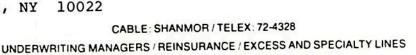
BY: Kenneth S. Jagmin

Special Risks Department

KSJ/jlm

cc: Mr. Frank Collin Frank B. Hall & Co. 88 Pine Street Wall Street Plaza New York, NY 10005

> Phelps Dodge Corp. 300 Park Avenue New York, NY 10022





### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

1201 ELM STREET
DALLAS, TEXAS 75270
August 20, 1982

Mr. B. H. Spoon Phelps Dodge Refining Corporation El Paso Works P. O. Box 20001 El Paso, Texas 79998

Reference: TXD 00 739 7144

Dear Mr. Spoon:

Thank you for your recent submittal of the required documentation to show compliance with the Resource Conservation and Recovery Act (RCRA) financial regulations, 40 CFR 265, Subpart H, as amended on April 7, 1982, 47 FR 16032, and April 16, 1982, 47 FR 16544. The State of Texas is authorized to operate an equivalent financial program in lieu of the Environmental Protection Agency. Therefore, your submittal has been forwarded to:

Mr. Robert G. Brydson, Jr. Texas Department of Water Resources P. O. Box 13087, Capitol Station Austin, Texas 78711 (512) 475-3345

If you have any questions, please call Henry Onsgard at (214) 767-8941 or me at (214) 767-2645.

Sincerely yours,

R. Stan Jorgensen, Chief Hazardous Materials Branch

cc: Texas Department of Water Resources

RCRA File

August 10, 1982

United States of America Environmental Protection Administration - Region VI First International Building 1201 Elm Street Dallas, Texas 75270

Attn: RCRA Financial Requirements Mr. Henry Onsgard

Dear Mr. Onsgard:

Enclosed is a letter from the insurance broker for our Corporation, Frank B. Hall & Co., which explains our status in attaining compliance with RCRA requirements for financial assurance for closure of our hazardous waste facilities. (We do not currently anticipate a program of post-closure care.)

As Mr. Collin points out, insurance of this type is of limited availability at the present time; but the Corporation is continuing to pursue full compliance with the regulations. If you have any questions, please contact me.

Sincerely,

B. H. Spoon

BHS/KSH/kc

Enclosure

cc: Richard Van Wagoner, Jr. - New York Corporate Risk Manager





Frank B. Hall & Co. International Aviation Division 261 Madison Avenue New York, N.Y. 10016

August 3, 1982 ·

United States of America Environmental Protection Administration - Region VI First International Building 1201 Elm Street Dallas, Texas 75270

Attn: RCRA Financial Requirements

Mr. Henry Onsgard

Phelps Dodge Corporation Phelps Dodge Refining Corporation El Paso, Texas - Refinery and Environs EPA No.: (Unevailable) Tx D007397144 Closure and Post-Closure Insurance

#### Gentlemen:

This is written at the request of Phelps Dodge Refining Corporation to advise that this office at PDRC's request is currently working on the development and procurement of closure and post-closure insurance meeting applicable CFR specifications.

You are of course ovare of the unsettled and limited state of the private insurance market for this product at the moment.

We will endeavor to keep EPA posted on progress with the placement if carried out or in the alternative, should PDRC elect to satisfy the financial responsibility requirements by other means, what those means are to be.

Yours very truly.

Frank C. Collin

Vice President

FCC/le

11/14

# DIE DE ADDITE Relining Corporation El Paso Works • P.O. Box 20001, El Paso, Texas 79998 • (915) 778-9881

June 9, 1982

Texas Department of Water Resources P. O. Box 13087 Capitol Station Austin, Texas 78711

Attention: Minor B. Hibbs, Permits Section

Re: Solid Waste Registration #30104

Dear Mr. Hibbs:

I wish to update and correct our notice of registration #30104 as recommended by Mr. Gary Raven of the District 10 Office.

- 1. The "person in charge" is the undersigned, Karen S. Heckmann.
- 2. The "number of employees" is currently fewer than 500.
- 3. For section "I. Waste Generated":

a. "01 Construction debris and non-combustible waste" is now being disposed of offsite.

b. "04 Air pollution scrubber waste" is not a uniquely identifiable waste as it exits our production area. The scrubber residue undergoes further processing for copper recovery. The only waste stream leaving this process is "07 Wastewater containing acids, metals, oils, and solvents" which contains anything that might be left over from processing the scrubber waste.

Therefore, "04 Air pollution scrubber waste" should be deleted from our notice of registration.

Mr. Minor B. Hibbs Page 2 June 9, 1982

- 4. For section "III. On-site Waste Management Facilities":
  - a. "01 Landfill (Type Unspecified)" is now for disposal of waste 03 only. (Why waste 07 was ever listed here is a complete mystery.)
  - b. "03 Waste Treatment Facility" is for storage of waste 07 only. As discussed above, waste 04 should be deleted from the notice of registration because it is not a uniquely identifiable waste but is effectively included in waste 07.
- 5. For section "IV. Records":

Again "04 100550 Air Pollution Scrubber Waste" should be deleted.

If you have any questions or need additional information about these requested changes, please contact me at (915) 778-9881 Extension 251.

Yours truly,

Karen S. Heckmann

Harry S. Gleckmann

Engineer

KSH/kc

Other

# Texas Department of Water Resources INTEROFFICE MEMORANDUM

TO :	Fi	W. Registration # <u>30/04</u> le (Existing/New) Application # <u>/069</u> !	DATE:	3/4/22
FROM :	RCF	RA Forms Consolidation Team		
SUBJECT:	Com Sit	pany: Phelps Lodge Re	£	El Mac
Attached	herew	rith please find the following document(s):		
***********	_	EPA 8700-12		
	<u> </u>	EPA 3510		
	_	TDWR Part A		
E	-	Other:		
			NACES EVA	

These documents are being placed in this file until processing at a later date.

Confidential material associated with these documents  $\pm 15/15$  NOT) being held in the solid waste section for review.

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# HAZARDOUS WASTE ADMINISTRATIVE CHECK LIST

1.	Acti	ve Corporation	Yes ( )	No ( )
2.	Post	age Fee Present	Yes ( 1/)	No ( )
3.		ature Page (Original) Signed by propriate Person	Yes ( )	No ( )
4.	Sign	ature Page Notarized	Yes ( 🗸)	No ( )
5.		ptable List of Landowners and ir Addresses	Yes ( · )	No ( 20)
6.	Acce	ptable Map of Landowner Locations	Yes ( )	No ( 🔭
7.		atory Attachments Identified on e 16	Yes ( )	No ( )
	a.	USGS Map	Yes ( 1/)	No ( )
	b.	Site Legal Description	Yes ( 1/)	No ( )
	С.	Hazardous Waste Facility Component Summary Sheet	Yes ( $\checkmark$ )	No ( )
	d.	Facility Boundaries and Adjacent Waters Map	Yes ( V)	No ( )
	e.	Photographs	Yes ( )	No (1)
	f.	Process Flow Diagram/Description	Yes ( )	No ( 🏏
	g.	Copy of Lease if Site is not MA Owned by Applicant	Yes ( )	No ( )
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### "ENT OF WATER RESOURCES

PERMIT APPLICATION FOR	03702
INDUSTRIAL SOLID WASTE STORAGE/PROCESSING/DISPOSACE SACTE TYNO	7C691
PART A - FACILITY BACKGROUND INFORMATION AND AND AND AND AND AND AND AND AND AN	
ADM. REVIEW BY	্ৰ নুমুন্ত
CORIES SENT:	Towns
1. GENERAL INFORMATION ACTIVE C# 800 120 15	O., (CHECK)
A. Applicant: Phelps Dodge Refining Corp.  Undividual, Corporation, or Other Legal Entity No.	ame
Address: P. O. Box 20,001	
City: El Paso State: Texas Zlp Code: 79998	
Telephone Number: <u>(915) 778-98</u> 81	
B. Authorized Agents	
during the processing of the permit application. Also in the capacity in which each person may represent the application (engineering, legal, etc.). The person listed first will the primary recipient of correspondence regarding this application the complete mailing addresses and phone numbers.  B. H. Spoon, Plant Manager L. R. Hammond, Plant Engineer B. E. Stephens, Engineer	icant be oplication.
<ol> <li>List the individual and his/her mailing address that will responsible for causing any necessary public notices to b in the newspaper.</li> </ol>	be e published
Name: B. E. Etephens	
Address: P. O. Box 20,001	
City: El Paso State: Texas Zip Code: 79	9998
Telephone Number: (915) 778-9881	
RECEIV	
	ÉD

PERMIT CONTROL

3. List the applicant's authorized agent fo	or service.
Name: B. H. Spoon	
Address: P. O. Box 20,001	
City: El Paso State: Texas	Zip Code: 79998
Telephone Number: (915) 778-9881	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C. Operator: identify the entity who will con if same as applicant, state "same as applicant."	
Name: Same as above	
Address:	
Cify: State:	Zip Code:
Telephone Number:	
D. Ownership	
I Indicate the ownership status of the fac	cility:
a. Private <u>X</u>	
(1) Corporation X (2) Partnership	
(3) Proprietorship (4) Non-profit organization	
b. Public	
(I) Federal (2) Military	
(3) State	
(4) Regional (5) County (6) Municipal	
(6) Municipal	
a Other (enecify) t	Self-Transfer Se
c. Other (specify)	annlicant?
c. Other (specify)  2. Is facility and site property owned by a  X Yes No	applicant?

- Submit as an attachment a copy of the lease for use of said facility and/or site property, as appropriate; and
- b. Identify the facility owner. If same as applicant in Part A above, state "same as applicant." If different from the applicant, please note that the owner is required to sign the application on page 5.

Name: Sam	e as applicant	
Address:		
City:	State:	Zip Code:
Telephone Number		
Type of Permit A	oplication:	
i. New	X .	
2. Amendment	(TDWR:Permit Nu	Imber: 1
Registration and	Permit Information	
L. Denote your Ti	DWR Solid Waste Registr	ation Number If none st

- 1. Denote your TDWR Solid Waste Registration Number. If none, state "none." 30104
- 2. Indicate (by listing the permit number(s) in the appropriate column below) all existing or pending State and/or Federal permits or construction approvals which perfain to pollution control or industrial solid waste management activities conducted by your plant or at your location. Complete each blank by entering the permit number, or the date of application, or "none".

Relevant Program and/or Law

大学设计的特殊的 (Park 1997)	<u>Permit No.</u>	Government Agency*
a. Texas Solid Waste Disposal Act	30104	<u>TDWR</u>
b. Wastewater disposal under the Texas Water Code	00461	TDWR
c. Underground injection under the Texas Water Code	None	
d. Texas Clean Air Act	R-147 thru R-1	51 TACB
e. Texas Uranimum Surface Mining & Reclamation Act	<u> None</u>	
f. Texas Surface Coal Mining & Reclamation Act	<u>None</u>	
g. Hazardous Waste Management program under the Resource Conservation and Recovery Act	None	

n.	UIC program under the Safe Drinking Water Act	None
i	NPDES program under the Clean Water Act	None
j.	PSD program under the Clean Air Act	None
k.	Nonattainment program under the	Control of the Contro
	Clean Air Act	None
1.	National Emission Standards for	<b>建设设置的</b> 1982年1983年1983年1983年1983年1983年1983年1983年1983
1	Hazardous Pollutants (NESHAPS) precon-	
	struction approval under the Clean	. None
10.7	Air Act	A Company of the Comp
m.	Ocean dumping permits under the Marine	
	Protection Research and Sanctuaries Act	None
n.	Dredge or fill permits under section	TO THE RESERVE AND A SECOND ASSESSMENT
	404 of the Clean Water Act	None
٥.	Other relevant environmental permits	None

Use the following acronyms for each agency as shown

TDWR = Texas Department of Water Resources

TACB = Texas Air Control Board

TRC = Texas Railroad Commission

TDH = Texas Department of Health.
TDA = Texas Department of Agriculture

= U. S. Environmental Protection Agency

CORPS = U. S. Army Corps of Engineers

G. Description of Business

Give a brief description of the nature of your business.

# Electrolytic Refining of Copper

- 2. List the principal products and/or services which are provided by your plant. Please itemize by Standard Industrial Classification (SIC) codes.
  - 33 Electrolytic Cathodes Wirebars Ingot Bars

B. H. Spoon		, Plant Manager
(Name)		(Title)
, B. E. Stephens (Name)		, Engineer (Title)
iar with the information and that, based on my i	n submifted in this nquiry of those indi mation, I believe th	rsonally examined and am fam document and all attachments viduals immediately responsil at the information is true,
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ignature: 11/13 / 51	phin "	, Date: <u>8-20 - 80</u>
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	in and for El Paso Co	June 1, 198
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	in and for El Paso Co	Notary Public Antenna (650)
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DATE \$/22/80  RECEIVED FROM Philips & ADDRESS EC Pauci	PARTMENT OF WATER RESIDENCE AUSTIN, TEXAS  Special Fund 41	Notary Public Incend (65)  County, Tex  RECEIPT NO. 803792
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#### LL. SITE BACKGROUND INFORMATION

A. Location of Site

I. Facility Name: Phelps Dodge Refining Corp.

Street Address, if available: North Loop Road

El Paso, Tx. County: El Paso

 Are your waste management operations within the extraterritorial jurisdiction of a municipality?

X Yes No

If you checked "yes," what municipality? EL Paso

- Give a verbal description of the location of the facility site with respect to known or easily identifiable landmarks.
- . Immediately east of Standard Oil Refinery
- Defail the access routes from the nearest U.S. or State Highway to the facility site.

In El Paso, Hawkins exit South from IH-10, then West Approx. 2 miles on North Loop Road, Plant entrance is on North side of street

- 5. Submit as "Attachment A" a United States Geological Survey (USGS), 7½ minute quadrangle map. Indicate on this map the location of the site and the land use patterns of the areas within ' mile (1.6 km) of the sife boundaries te.g., residential, commercial, recreational, agricultural, undeveloped, etc.). Each area of land use should be labeled on the map. (Note: if such a map is not available, submit a substitute map such as a State Department of Highways and Public Transportation county map with sufficient scale to adequately show the site location and surrounding land use patterns.
- 6. a. Submit as "Attachment B" a map indicating the boundaries of all adjacent parcels of land, and a list of the names and mailing addresses of all adjacent landowners and other nearby landowners who might consider themselves affected by the activities described by this application. Cross-reference this list to the map through the use of appropriate keying techniques. The map should be a USGS map, a city or county plat, or another map or drawing with a scale adequate enough to show the cross-referenced affected landowners.

	。	14.10 mm 14	The Property of the Parket	Charles and the second
b. Indicate fro	m what source(s	) the names a	nd addresses	of persons
			Secretary Secretary	402.23
∵ :identified a	is affected were.	obtained.	<b>阿里斯尼里里里斯克利斯</b>	<b>经</b> 国际工作工作工作工作工作工作工作工作工作工作工作工作工作工作工作工作工作工作工作

City
County
School District
Water District
Abstract Co.
Other (specify) Phelps Dodge Records

7. Enter the geographical coordinates of the site:

Latitude: <u>N31</u> deg <u>45</u> min <u>46</u> sec Longtitude: W106 deg 23 min 18 sec

8. Is the facility located on Indian lands? Check one:

Yes X No

B: Legal Description of Site

Submit as "Attachment C" a legal description of the entire tract of land upon which the waste management operations referred to in this permit application occur or will occur.

- C. Site Environmental and Technical Information
  - 1. Climatic and Hydrologic
    - a. Is any portion of your waste management facility site (including proposed, active, and inactive portions) subject to flooding from adjacent or nearby surface water bod as under the following conditions?

 24-hr
 Rainfail Event
 Yes
 No

 5-year
 X
 X

 50-year
 X
 X

 100-year
 X
 X

b. Are there any producing groundwater wells on your site property?

<u>X</u> Yes <u>N</u>o

If you checked "yes,"

()) Indicate the number of such wells:  $6 - \frac{1}{2}$ , and

(2)	Indicate the corresponding water uses below:
	(a) Industrial uses:  Cooling water X  Process water X  Fire-control water X
	(b) Potable (drinking) water:X
	(c) Agricultural uses:  Irrigation water for livestock food crops or grazing  land  Livestock watering  Irrigation water for human food crops
	any adjacent or nearby surface waters utilized by the icant?
	Yes X Na
lf y belo	rou checked "yes," indicate the corresponding water uses w:
(1)	Industrial uses: Cooking water Process water Fire-control water
(2)	Potable (drinking) water
(31	Agricultural uses: Irrigation water for livestock food crops or grazing land Livestock watering Irrigation water for human food crops
Site Lar	nd Use and Subsidence Information
はなると、例とは20世紀であることとである。 こう	any portion of the overall site property utilized for cultural purposes?
	Yes <u>- x</u> No
11	ou checked "yes," indicate the corresponding uses below:
(1) (2) (3)	Grazing Livestock food crop Human food crop
	you checked no. (2) or $\overline{(3)}$ , specify the types of crops
The Barrier Street, and the St	any portion of the overall site property subject to land sidence?
	Yes <u>X</u> No

If you checked "yes," estimate the magnitude of the greatest subsidence that has occurred (in units of feet).

#### III. WASTES AND WASTE MANAGEMENT

A. Waste Generation and Management Activities

Is any hazardous industrial solid waste (see Title 40, Code of Federal Regulations, Part 261) presently or proposed to be generated at your facility?

X Yes No

If you checked "no," go to Section III.B.2. below. If you checked "yes," answer the following question.

I. Are you presently registered with TDWR as a solid waste generator?

X Yes No

If you checked "no," contact the Solid Waste Section of TDWR in Austin, Texas to obtain registration information. Also, continue with the application form (go to Number 2 below).

If you checked "yes," go to Section 1 of your Notice of Registration, determine which of your wastes are hazardous, and list these wastes (and mixtures) in Table III-I (see Number 2 below).

2. Complete Table III-I below, listing all hazardous wastes and all mixtures containing any hazardous waste which are presently or proposed to be generated at your facility. (see 40 CFR 261.31-331, attaching additional copies as necessary.

In this table, "TDWR Sequence Number" refers to the number in the left-hand column in Section 1 of your Notice of Registration (Note: if you are not registered with TDWR, enter "NA" for TDWR Sequence Number and TDWR Waste Code Number).

For the EPA Hazard Code and EPA Hazardous Waste Numbers, see 40 CFR 261.30-33. For annual quantity, provide the amount in units of pounds (as generated) for each waste and/or waste mixture.

Please group the listings of wastes by SIC code, insofar as your processes are designated by SIC codings. Also, within the general SIC code groups, give a brief description of the specific process or operation from which the waste has been generated.

- B. Waste Management Facilities Summary
  - I. For each waste and waste mixture listed in Table III—I that is presently or proposed to be managed on—site, provide the summary sheet shown in Table III—2 (Note: you must make copies of Table III—2 and submit the completed set of tables as "Attachment D").

Table III-i Generated Hazardous Wastes and Management Activities

A A A A A A A A A A A A A A A A A A A				المام								0	*	
opde	ssaot	.33												
S 0	L. L.													
Charles Town	25 25 60	是在这个一个工作。	100 mg	20 Per 20 Per	PMF97-1/3	25,27,00005	Sec. 2012	Part School Afterna	COMPANIE OF	经国际的 经产业	SSNIFCASIC	CALLS 57.3	70.00	100
Annual Quantity	(lbs)	3.5 M												
	Disposal													
ent Activities— cable items) On-Site	32		1.4				于共和	ST THE	4 10					E MILE
				10.1	4.4			717				4.00		
Off Site	Disposal													
EPA	Waste No.													
EPA	Code													
TDWR	Number													
TDWR	Number													
		in H <sub>2</sub> O	ı							T.				
Verbal	of Waste	H <sub>2</sub> SO <sub>4</sub> in												
		H <sub>2</sub>									是 1000年			

<sup>&</sup>quot;Storage" means the interim containment or control of waste after generation and prior to ultimate disposal.

preparation of solid waste for reuse or disposal, including the treatment or neutralization of hazardous waste so as to render such 2 "Processing" means the extraction of materials, transfer, volume reduction, conversion to energy, or other separation and waste for reuse or disposal as used above, does not include the actions of a carrier in conveying or transporting solid waste by truck, waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced volume. The "transfer" of solid

### Table III-2 Hazardous Waste Management Facility Component Summary Sheet

Verbal Description of Waste	H <sub>2</sub> So <sub>4</sub> in H <sub>2</sub> O		
Process (see last column in Table [11-1]	Wash water from Copper Sulfate Plant		
TDWR, Sequence Number of Wasfe (if assigned)			
Indicate the facility components used for s specified waste by entering the number of s is managed.	torage/processing/disposal of the above- uch facility components by which this waste		
Lagoon/Pond (unlined)	Landfarm :		
<u>x</u> Lagoon/Pond (lined)	Landspreading Area		
Basin (earthen, above-grade lined)	Spray Irrigation Area		
Basin (earthen, above-grade unlined)	Flood_Irrigation Area		
Basin (earthen, below-grade lined)	Septic Tank/Drain Field		
Basin (earthen, below-grade unlined)	injection Well		
Basin (concrete, above-grade lined)	Tank (surface storage)		
Basin (concrete, above-grade unlined)	Tank (sub-surface storage)		
Basin (concrete, below-grade lined)	Tank (surface processing)		
Basin (concrete, below-grade unlined)	Tank isub-surface processing)		
Basin (other)	Tank (other)		
Pit (fined)	Drum Storage Area (open)		
Pit (unlined)	Drum Storage Area (enclosed)		
Incinerator	Drum Starage Area (other)		
Open Controlled Incineration Area	Bulk Storage Area (open)		
Boiler (energy-producing)	Bulk Storage Area (enclosed)		
Landfill (sanītary)	Bulk Storage Area (other)		
Landfilk (surface; open)	Ofher/ispecify		
Landfill (other)	)		

2. Has the applicant at any time conducted the on-site storage, processing, or disposal of industrial solid waste now identified or listed as hazardous waste?

X			

If you checked "yes," complete Table 111-3 indicating the hazard—ous industrial solid waste management facility components which were once utilized at your plant site but are no longer in service Li.e., inactive facility components).

If you checked "no," and if no hazardous industrial solid waste is presently or proposed to be generated or managed at your facility, then you need not file this permit application. Otherwise, proceed with application form.

3. For each facility component indicated in Table 111-2 (Attachment D) and Table 111-3, complete the following Table 111-4 attaching additional copies as necessary. Enter the name of each facility component as specified in the earlier tables.

Give the design capacity of each facility component in any of the units shown. In the case of inactive facilities for which design details are unavailable, an estimate of the design capacity is sufficient.

Please note that each facility component should be described in your own words on the line provided for "verbal description."

- 4. Provide an estimate of the fotal weight (lbs) of hazardous indusfrial solid waste material that has been disposed of and/or stored within your site boundaries and not removed to another site.
- C. Location of Waste Management Facilities and Components
  - F. Submit as "Attachment E" a drawn-to-scale fopographic map (or other map if a topographic map is unavailable) extending one mile (and only one mile) beyond the property boundaries of the overall plant site, depicting the following:
    - a. The approximate boundaries of the site (described in Section II B) and within these boundaries, the location and boundaries of the areas occupied by each active, inactive, and proposed facility component (see Tables III-2 and III-3 for facility components). Each depicted area should be labeled to identify the facility component(s), component status (i.e., active, inactive, or proposed), and area size in acres.

#### Not Applicable

Table 111-3 Inactive Hazardous Industrial Solid Waste Management Facility Components

Indicate the inactive facility components which were used for storage/processing/disposal of hazardous wastes or mixtures containing any hazardous waste by entering the number of such facility components in the space provided.

. V.	Lagoon/Pond (lined)	_ Landspreading Area
52	Basin (earthen, above-grade lined)	_ Spray Irrigation Area
	Basin tearthen, above-grade unlined)	Flood Irrigation Area
5.0	Basin (earthen, below-grade lined)	_Septic Tank/Drain Field
10	_ Basin (earthen, below-grade unlined)	Injection Well
	Basin (concrete, above-grade lined)	Tank (surface storage)
100	Basin (concrete, above-grade unlined)	_ Tank (sub-surface storage)
	Basin (concrete, below-grade lined)	_ Tank (surface processing)
Z.	Basin (concrete, below-grade unlined)	_ Tank tsub-surface processing
	Basin (other)	_ Tank (other)
	Pit (lined)	_ Drum Storage Area topen)
	Pit (unlined)	Drum Storage Area (enclosed)
1.00	Incinerator	_ Drum Storage Area (other)
Single	Open Controlled Incineration Area	Bulk Storage Area (open)
	_ Boiler (energy-producing)	Bulk Storage Area (enclosed)
	_ Landfill (sanitary)	Bulk Storage Area (other)
	Landfill (surface, open)	Other (specify
	_Landfill (other)	